)T COOPERATION TREATY

From the INTERNATIONAL BUREAU

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

To:

Commissioner **US Department of Commerce United States Patent and Trademark** Office, PCT 2011 South Clark Place Room

CP2/5C24

Arlington, VA 22202

Date of mailing (day/month/year) 10 July 2001 (10.07.01)	ETATS-UNIS D'AMERIQUE in its capacity as elected Office		
International application No. PCT/US00/19090	Applicant's or agent's file reference		
International filing date (day/month/year)	Priority date (day/month/year)		
13 July 2000 (13.07.00)	13 July 1999 (13.07.99)		
Applicant			
VAN NICE, Jeff, G. et al			

	1.	The designated Office is hereby notified of its election made:
		X in the demand filed with the International Preliminary Examining Authority on:
		09 February 2001 (09.02.01)
		in a notice effecting later election filed with the International Bureau on:
 -	2.	The election X was
		was not
		made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland

Authorized officer

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(19) World Intellectual Property Organization International Bureau



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PCT

(10) International Publication Number WO 01/04025 A3

(51) International Patent Classification7:

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(21) International Application Number: PCT/US00/19090

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(71) Applicant (for all designated States except US): ARROW-HEAD SYSTEM LLC [US/US]; 124 North Columbus Street, P.O. Box B, Randolph, WI 53956 (US).

Published:

with international search report

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NL, PT, SE).

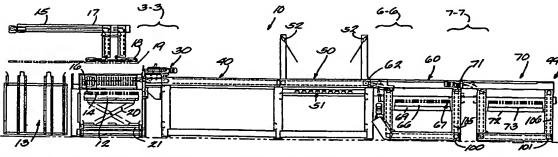
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(88) Date of publication of the international search report: 26 July 2001

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SHEET SEPARATOR, INSPECTION, SORTATION AND STACKING SYSTEM



(57) Abstract: The present invention is embodied in a separator sheet handling assembly (10) that includes a lifting assembly (20) adapted to receive a pallet (12) containing a stack of separator sheets (14). The lifting assembly (20) positions the stack of separator sheets (14) into a predetermined location where a feed assembly (30) engages a separator sheet (16) positioned at the top of the stack of separator sheets (14). The feed assembly (30) removes the separator sheet (16) and transports it to a test assembly (50) where the separator sheet (16) is monitored for a particular characteristic such as cleanliness or structural integrity. The separator sheet (16) is delivered to a first storage assembly (60) if the separator sheet (16) has the particular characteristic, or a second storage assembly (70) if the separator sheet (16) does not include the particular characteristic.

0.01/04025

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/19090

A CLASSIFICATION OF THE PROPERTY OF THE PROPER				
A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : B65H 7/02 US CL : 271/265.04				
According to International Patent Classification (IPC) or to both r	national classification and IPC			
B. FIELDS SEARCHED				
Minimum documentation searched (classification system followed U.S. : Please See Continuation Sheet	by classification symbols)			
Documentation searched other than minimum documentation to the	e extent that such documents are included	in the fields searched		
Electronic data base consulted during the international search (nan USPO, EPO, JPO, Derwent	ne of data base and, where practicable, sea	arch terms used)		
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category * Citation of document, with indication, where	appropriate, of the relevant passages	Relevant to claim No.		
Y. P US 6,082,732 A (HUTCHISON et al.) 04 July 200 of entire document.	0 (04.07.2000), Figure 2 and remainder	1 and 33		
Y US 5,115,144 A (KONISHI et al.) 19 May 1992 (1 remainder of entire document.	9.05.1992), Column 4, lines 1-37 and	1, 20, 21 and 33		
Y, P US 5,979,891 A (ROUX) 09 November 1999 (09.1 remainder of the document.	1.1999), Column 1, lines 4-23 and entire	1 and 33		
Y US 3,812,964 A (WOODRUFF) 28 May 1974 (28. 47, column 7, lines 12-17 and entire remainder of column 7.	05.1974), Figure 2. Column 6, lines 42-document.	I, 4, 22-29 and 33-35		
	US 4,768,913 A (BABA) 06 September 1988 (06.09.1988), Figures 1-3 and remainder of 1, 5, 6, 8-11, 14-16, 3			
Y US 4,180,258 A (WILDFORSTER) 25 December 1 remainder of entire document.	US 4,180,258 A (WILDFORSTER) 25 December 1979 (25.12.1979), Figure 3 and 1, 32 and 33			
Y US 4,211,398 (BISHOP) 08 July 1980 (08.07.1980) entire document.), Figures 1 and 2 and remainder of	1, 5, 6, 8, 9, 12-17, 33 and 40		
Y US 4,245,830 (FICHTE et al.) 20 January 1981 (20 remainder of document.	US 4,245,830 (FICHTE et al.) 20 January 1981 (20.01,1981). Figure 1 and entire			
Further documents are listed in the continuation of Box C.	See patent family annex.			
Special categories of cited documents:	"T" later document published after the inte	rnational filing date or priority		
"A" document defining the general state of the art which is not considered to be of particular relevance	date and not in conflict with the applic principle or theory underlying the inve	ention		
"E" carlier application or patent published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to	"X" document of particular relevance; the considered novel or cannot be consider when the document is taken alone	claimed invention cannot be red to involve an inventive step		
establish the publication date of another citation or other special reason (as "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is				
O" document referring to an oral disclosure, use, exhibition or other means combined with one or more other such documents, such combination being obvious to a person skilled in the art				
"P" document published prior to the international filing date but later than the "&" document member of the same patent family priority date claimed				
Date of the actual completion of the international search Date of mailing of the international search report				
20 December 2000 (20.12.2000) 18 JAN 2001				
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Authorized officer				
Box PCT Washington, D.C. 20231	Christopher P Ellis Diane	Smitt f		
Facsimile No. (703)305-3230	Telephone No. 703-308-1113	7. 0		
form PCT/ISA/210 (second sheet) (July 1998)				

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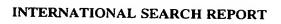


International application No.

PCT/US00/19090

C (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT						
Category*	Citation of document, with indication, where appropriate of the relevant passages	Relevant to claim No.				
Y	US 4,765,606 A (MARASS) 23 August 1988 (23.08.1988), Figures 1 and 2 and remainder of entire document.	2, 3, 5-7, 39 and 40				
Y	US 3,717,249 A (FALEY) 20 February 1973 (20.02.1973), Figures 1 and 14 and remainder of entire document.	1, 4, 22, 24-29, 33, 34 and 37				
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Form PCT/ISA/210 (continuation of second sheet) (July 1998)



International application No.

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299 303 305 217 248: 209	/534, 588; 73/37.7, 838; 101/7	717203.04, 3.13, 3, 4.02,7, 10	0.01, 12, 13, 90, 93, 171, 22	0, 98, 272,
257, 505, 505, 217, 240, 209	1334, 366, 13131.1, 636; 10111	3 and all of classes 2/1 and 20	09 for key words.	
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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference			
18049-9030	FOR FURTHER ACTION	Preliminary Examination Report (Form PCT/IPEA/416	
International application No.	International filing date (day/mo	nth/year)	Priority date (day/month/year)
PCT/US00/19090	13 July 2000 (13.07.2000)		13 July 1999 (13.07.1999)
International Patent Classification (IPC)	or national classification and IPC		13 July 1999 (13.07.1999)
IPC(7): B65H 5/00, 7/12 and US Cl.: 27	71/265.04		
Applicant			
ARROWHEAD SYSTEMS LLC			
This international prelimin Examining Authority and i	ary examination report has bee s transmitted to the applicant a	n prepared by coording to A	this International Preliminary rticle 36.
2. This REPORT consists of	a total of $\frac{3}{2}$ sheets, including	this cover she	et.
This report is also acc	ompanied by ANNEXES, i.e.,	sheets of the	description, claims and/or drawings
which have been ame	ided and are the basis for this	report and/or s	Sheets containing rectifications made
before this Authority	(see Rule 70.16 and Section 60	77 of the Admi	nistrative Instructions under the PCT).
These annexes consist of a			
3. This report contains indicate	tions relating to the following i	tems:	
l 🔀 Basis of the repo	rt		
II Priority			
, III Non-establishme	of report with regard to now	altu inuantiva	step and industrial applicability
IV Lack of unity of		eny, inventive	step and industrial applicability
	ent under Article 35(2) with re	gard to novel	
applicability; cita	tions and explanations support	ing such stater	y, inventive step or industrial
VI Certain documen		0	
VII Certain defects in the international application			
VIII Certain observations on the international application			
- <u></u>			
Date of submission of the demand			
Date of submission of the demand	Date of	of completion (of this report
09 February 2001 (09.02.2001)	19 July	2001 (19.07.26	001)
Name and mailing address of the IPEA/US	Author	ized officer	
Commissioner of Patents and Trademarks Box PCT	Christ	opher P Ellis	Dione Smith f
Washington, D.C. 20231 Facsimile No. (703)305-3230			
Form PCT/IPEA/409 (cover sheet)(July 199	(8)	one No. 703-30	90-1113

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.	
PCT/US00/19090	

I.	Bas	is of the report
1.	With	regard to the elements of the international application:*
	\boxtimes	the international application as originally filed.
	\boxtimes	the description:
		pages 1-7 as originally filed
		pages NONE , filed with the demand
	<u></u>	pages NONE, filed with the letter of
	\bowtie	the claims:
		pages 8-14 as originally filed
		pages NONE , as amended (together with any statement) under Article 19
		pages NONE , filed with the demand pages NONE , filed with the letter of
	\square	
		the drawings:
		pages 1-6 , as originally filed
		pages NONE , filed with the demand pages NONE , filed with the letter of
	Ш	the sequence listing part of the description:
		pages NONE , as originally filed pages NONE , filed with the demand
		pages NONE , filed with the letter of
2.	With	regard to the language, all the elements marked above were available or furnished to this Authority in the
	langı	to the international application was filed, unless otherwise indicated under this item.
	Thes	e elements were available or furnished to this Authority in the following language which is:
		the language of a translation furnished for the purposes of international search (under Rule23.1(b)).
	Ħ	the language of publication of the international application (under Rule 48.3(b)).
	H	
		the language of the translation furnished for the purposes of international preliminary examination(under Rules 55.2 and/or 55.3).
3.	With	regard to any nucleotide and/or amino acid sequence disclosed in the international application, the
į	interr	national preliminary examination was carried out on the basis of the sequence listing:
!	$\overline{}$	contained in the international application in printed form.
		filed together with the international application in computer readable form.
		furnished subsequently to this Authority in written form.
		furnished subsequently to this Authority in computer readable form.
		The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the
		international application as filed has been furnished.
		The statement that the information recorded in computer readable form is identical to the written sequence listing
		has been furnished.
4.	\boxtimes	The amendments have resulted in the cancellation of
		the description, pages NONE
		the claims, Nos. NONE
		the drawings, sheets/fig NONE
5. [This report has been established as if (some of) the amendments had not been made, since they have been considered to go
* r		beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**
this	repor	ement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in 1 as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17). placement sheet containing such amendments must be referred to under item 1 and annexed to this report.
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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US00/19090

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement					
1. STATEMENT					
	Novelty (N)	Claims 1-40 Claims NONE	YES NO		
	Inventive Step (IS)	Claims 1-40 Claims NONE	YESNO		
	Industrial Applicability (IA)	Claims 1-40 Claims NONE	YES		

2. CITATIONS AND EXPLANATIONS (Rule 70.7)

Although in Claims 1, 2, 5-7, 9, 12-16, 19-22, 26, 28, 33, 34 and 39 Hutchinson et al. discloses a separator sheet handling system (14), sheets (18), different locations (38 or 46), feed assembly (20), test assembly (10), first storage (38), second storage (46), alignment facility (30), lifting frame (10), fences ((7), first drive roller (24), pivotal connection that is moveable in relation to the support structure (top of 20), vacuum chamber (bottom of 20), positioning drive (column 2, lines 66-67), horizontal motion (Fig. 2), adjacency of the second recepticle to the frame ('Fig. 2), cleanliness monitoring (the monitor would certainly change output (monitor) if a grosely dirty sheet passed), monitoring structural integruty (the monitor would pick up holes in the sheets that affect structural integrity), directing guide (34), second storage assembly receiving guide (extension above 46), lifting frame (46), aligning before monitoring (the sheets are aligned at the stack before monitoring), but lacks a lifting assembly, pallet and aligning guides and Marass discloses a lifting assembly (column 1, lines 6-9), pallet 4 and aligning guides 7, there is no motivation found in the art of record to make the combination.

Claims 1-40 meet the criteria set out in PCT Article 33(2)-(4), because the prior art does not teach or fairly sugges the combination.

Form PCT/IPEA/409 (Box V) (July 1998)